

States can face many obstacles to sustaining statewide longitudinal data systems (SLDSs) after initial funding sources have run out and start-up project goals have been met. This brief presents three scenarios inspired by challenges encountered by many states as they work to maintain and enhance their data systems over time. The scenarios touch on the four essential components of data system sustainability illustrated by the Sustainability Framework (see figure 1).

For each scenario, the brief identifies root causes of the situation, strategies to address the situation and sustain the data system, and recommendations for avoiding similar circumstances in the future. The strategies and recommendations were developed by state SLDS team members during the 2016 SLDS Best Practices Conference.



Figure 1. Sustainability Framework

Scenario 1: Data Use and Changes in Leadership

Framework Component: Ensuring Widespread Use

An SLDS partner agency has had a change in leadership, and the vision and priorities of the new leader are unclear. The SLDS team believes that the new leader's lack of support and understanding of the SLDS is causing program staff to lose interest in the system. However, an SLDS analyst produces metrics showing that SLDS use by program staff has been low since the system was launched several years ago—long before the recent leadership change.

Problem and Root Causes

Usage metrics indicate that an important user group has not been using the SLDS as extensively as expected. A number of factors could contribute to the lack of use:

• Users might not be adequately aware of the SLDS or encouraged to use it. If the vision for the data system, its role in its partner agencies, and its value This product of the Institute of Education Sciences (IES) SLDS Grant Program was developed with the help of knowledgeable staff from state education agencies and partner organizations. The content of this publication was derived from the Statewide Longitudinal Data Systems (SLDS) Best Practices Conference that took place in February 2016. The information presented does not necessarily represent the opinions of the IES SLDS Grant Program. We thank the following people for their valuable contributions:

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For more information on the IES SLDS Grant Program or for support with system development, please visit http://nces.ed.gov/programs/SLDS.



to users are not explicitly incorporated into each agency's mission and communicated to users, the agencies will not incorporate the SLDS into their business practices.

- Users might be unable to make the SLDS part of their regular workflow. They may have inadequate training, the system may not be user friendly, or the data products coming from the system may not have been designed to meet their specific needs.
- The agency might have de-prioritized SLDS work in response to public concerns about data use or competing interests from agency or state leaders.

Whatever the cause, lack of widespread use threatens longterm sustainability of the SLDS because the system is not actively supporting essential agency functions.

Strategies

Improve communications and stakeholder engagement To increase awareness of the SLDS and its value to users, create an outreach or marketing team to re-establish communications with stakeholders about the system. Consider branding or re-branding the SLDS if its products and services are not easily identifiable or if negative perceptions are interfering with its use.

More closely involving stakeholders—including practitioners and policymakers who will be key users is essential to improving the data system. Use the SLDS's data governance structure to address concerns about data use and encourage members to support the system. Organize workgroups or focus groups with representatives of all user groups to make sure technical solutions and products align with their business needs, and identify "quick wins" to illustrate how the system can meet those needs. Provide more demonstrations of the system, training activities, and support for current and future users, such as pre-service educators. Recruit analysts or active users to promote the data system in their regions and to help train and develop relationships with other stakeholders.

Integrate the SLDS into each agency's mission and practices Discuss the vision for the SLDS with agency leaders and ask them to reaffirm their support for the system. Collaborate with leaders to create a research agenda or revisit an existing agenda to ensure that the SLDS can serve the agencies' interests and priorities. Using the research agenda as a guide, develop a plan to answer questions critical to users, and build new data reports and tools to add value for stakeholders. Identify and pursue data stories that will "humanize" the SLDS for users and demonstrate its capabilities. For example, using homeless student enrollment data from the SLDS to help allocate

State Example: Kentucky

Like many states, Kentucky has experienced changes in political and agency administrations that raise questions about the future of its SLDS work. Program leaders at the Kentucky Center for Education and Workforce Statistics (KCEWS) try to anticipate concerns about data work and address them without drawing unwanted negative attention to the SLDS. KCEWS personnel often open discussions about the data system with policymakers and state leaders by addressing privacy and security concerns directly and emphasizing that data privacy and security are KCEWS's top priorities.

funds for transportation or clothing illustrates how stakeholders can use data to improve learning conditions for at-risk groups.

Reprioritize the SLDS within the agency

Establish open communications about the SLDS throughout the agency, including holding meetings and demonstrations with new leaders, program staff members, and other individuals who can help influence and change current operations or perceptions. Conduct a needs assessment to determine users' interests and priorities and how well current SLDS products align to those needs. Monitor SLDS usage metrics and data requests over time to help quantify the system's utility for users and to develop case studies to show its value. Also consider ways to demonstrate the system's impact that are not evident from the metrics. Be prepared to demonstrate how the SLDS can support new initiatives, whether with its current capabilities or with expansions and enhancements.

Backing from outside the agency can also help focus attention on the SLDS. Gather statements, stories, and other evidence of support from state lawmakers, leaders of SLDS partner agencies, and members of the community, and recruit advocates to help promote the data system.

Recommendations Going Forward

As with many challenges to SLDS sustainability, planning ahead is vital. Implement the strategies above as early as possible to help avoid problems before they arise. Anticipate possible concerns and negative feedback about the data system to allow the SLDS team time to identify and implement mitigation strategies and to counter criticism that could discourage SLDS use later. Additionally, work with all partner agencies and users to identify data system enhancements that increase the system's relevance to their work in the future.

Scenario 2: Collaboration and Control

Framework Component: Stakeholder Support

State leaders recognize the value of having a P-20W+ (early childhood through workforce) SLDS and have endorsed the development and implementation of the system. SLDS partner agencies are engaged in its development and have signed memoranda of understanding (MOUs) to contribute data. However, when it is time to begin sharing data, the legal counsel from a postsecondary agency raises new questions about data privacy and the legality of data sharing. As a result, other partners are now raising concerns, and the partnership is looking shaky.

Problem and Root Causes

Stakeholder concerns and reluctance to participate can delay SLDS work and hinder future collaboration. States that require consensus decisionmaking among data contributors can be seriously affected by reluctance from one partner. The new concerns could be the result of the following:

- The agency might not be fully committed to SLDS work. The concerns raised by the legal counsel could be symptomatic of a broader lack of support, possibly due to a lack of strong leadership vision in the agency or poor communication about the goals of SLDS work from agency leaders. Key individuals outside agency leadership might not have been involved in discussions about the SLDS, or there might have been turnover among the individuals who were involved.
- There might be a lack of trust or clear communication across the SLDS partner agencies. Communications about and awareness of the SLDS might have declined over time, resulting in less focus on and enthusiasm for the project. External events such as a highly publicized data breach or new state priorities could also erode support for the SLDS.
- The details of the data sharing process and the roles and responsibilities for managing data might not be adequately covered in the MOUs. In addition to affirming the legal ability to share data, MOUs must be supported by engagement and trusting relationships among leadership, policy staff, and IT staff at each partner agency to ensure that the work is carried out.
- The legal foundation for data sharing might be unclear. Agencies' legal staff and other stakeholders might not completely understand the laws and regulations around data sharing, and they might fear losing control of their data or be concerned about liability if issues arise. Legal guidance, including from federal agencies, can confuse discussions by focusing on what cannot be done with data rather than affirming what can be done.

Most of these issues can be traced to ineffective data governance structures and processes rather than legal problems related to SLDS work. The strategies used to address SLDS partners' concerns focus on explaining data management practices, reinforcing decisionmaking structures, and engaging partners through data governance, as well as clarifying legal questions.

Strategies

Communicate one-on-one with the concerned partner Spend time with the individual who initially raised the concern—as well as others at the agency—to understand the source of the issue. Is the concern coming from agency leaders? From public input? From a new staff member? Engage your agency's legal counsel to help with the communications; in some cases, peer-to-peer discussions can help ensure that all sides are speaking the same language and avoid misunderstandings. Identify advocates within each partner agency, the government, or the public who can reach out to the concerned agency and promote the SLDS. Designate a point person to manage the situation and coordinate a response. If necessary, break the issue into smaller pieces to make it more manageable.

Engage with all partners across the program

Implement a communications plan to ensure that all partners are informed about SLDS work and issues. Let partners know when and how these specific concerns have been addressed so they will have confidence that future concerns will also be addressed. Conduct a feasibility analysis of the SLDS project to help manage expectations. Develop use cases for each partner agency to demonstrate why the agency is involved in the SLDS, its needs and expectations, its concerns, and how to help its staff feel comfortable and secure in the project.

Additionally, build relationships with key people at all levels of partner agencies and ensure that they understand and support the project's goals. Enlist agency leaders to involve

State Example: Iowa

Before the SLDS grant, the public universities in lowa historically interpreted the federal Family Educational Rights and Privacy Act (FERPA) to mean that student-record-level data can only be shared "upward" among educational agencies. The SLDS grant has led to agreements for judicious data exchange in both directions. The state started its data-sharing efforts with directory information and added other types of data over time. Each data contributor has veto power over use of its data, which helped some partners ultimately feel comfortable enough to join in SLDS work. other members of their teams with the project. An agency's policy toward the SLDS must come from leadership, not the legal counsel.

Revisit the MOU(s)

Make sure MOUs contain all necessary information about the SLDS goals, data sharing processes, and data use. Help partners feel more comfortable with the effort by building in veto power for data contributors at several stages of data sharing and use for different types of data. Make sure that the MOUs directly address the concerns that have been raised.

Clarify the legal foundation for data sharing

Bring together legal counsel from all partner agencies to discuss relevant terms and regulations. This approach will help build relationships, establish mutual trust and respect, and develop a shared understanding of legal and privacy requirements around data sharing. Tackle questions about data sharing from the perspective of identifying a process rather than asking permission; that is, the approach should be "how can we do this?" rather than "can we do this?" Contact legal representatives from federal offices to better understand the intent behind laws, including what can and cannot be done with data.

Recommendations Going Forward

Re-engaging all partners in cross-agency data governance can help increase awareness, clarity, and transparency around data sharing. It also encourages partners to take ownership for data system work. Partner agencies may become reluctant to participate if they do not feel involved in the work being performed. Reports, projects, or analyses that involve data from multiple agencies and are subject to multi-agency decisionmaking processes should be developed collaboratively among the data contributors. A cooperative approach ensures that each partner feels included in decisions and can lend their knowledge of their own data to the project. Additionally, revisit data governance policies and procedures to be certain they are relevant for the current environment, and ensure that all agencies understand the processes for making changes to the project, managing delays, and handling inflexibility from a partner.

Scenario 3. Funding the SLDS

Framework Components: Financial Support and Return on Investment

The state's federal SLDS grant is about to end. The SLDS project team is preparing to give a presentation to state and agency leaders about why and how the data system requires ongoing state funding. The team has been asked to justify the SLDS's costs, funding resources, and value. The presentation also must address political concerns and why the SLDS matters to the state. The current legislative session is about to end.

Problem and Root Causes

Without ongoing funding after the federal grant expires, the SLDS team will be unable to continue operating the system or enhance it in the future. Stakeholders will lose interest and withdraw support from the SLDS if enhancements cannot be made to meet their current and future needs. The following factors can lead states to scramble for money and support as existing funds are about to run out:

- The SLDS project team and its partners have not planned for sustainability by taking steps early in the project to identify and pursue support and funding sources for SLDS work once the current grant ends.
- State and agency leaders might not be aware of the SLDS's purpose, its value, or the consequences of discontinuing or not enhancing the SLDS to keep it relevant. If the system was built with federal funds, many state-level leaders might not have been fully aware of its development or of its value to stakeholders and may not understand the level of funding needed to support the SLDS and to ensure it continues to be relevant.
- Support for the SLDS may be lacking among key decisionmakers. Future funding opportunities could be limited by leadership priorities. In addition to competing with other programs for limited state budget funds, the support for the SLDS could be affected by privacy concerns, distrust of technology projects, lack of leadership commitment, or aversion to accepting federal funds among state leaders.

Strategies

Develop a sustainability plan

A sustainability plan documents the current operations and needs of the data system, and it identifies actions that can be taken to secure resources to maintain and enhance the system over time. Calculate and record in the plan the total cost of current SLDS operations, including hardware, software, and staff time. Also include the estimated costs for enhancements needed to keep the system responsive to future federal and state policy changes and relevant for stakeholders.

To inform the plan, conduct a feasibility study for SLDS operations with different levels of funding. Create contingency plans based on current and projected costs that

- establish priorities among current operations, products, and future enhancements;
- determine how those priorities will be scheduled and funded based on available resources; and
- identify current and potential cost savings resulting from use of the SLDS.

Developing the plan is an opportunity to explore potential funding opportunities and prepare options to present to state leaders. Determine how costs can be divided among SLDS partner agencies, and identify stakeholder agencies or programs within agencies that might have funding, staff, or other resources that they could contribute for projects that can be supported by the SLDS. Consider implementing a fee structure for stakeholders and partners to help pay for SLDS enhancements to meet their needs.

Raise awareness of the SLDS

Communicate directly with state leaders about the value and goals of the SLDS. Demonstrate to them what the SLDS does and how it can play a critical role in their work and support their priorities. Ensure that they understand the costs and support needed to sustain the SLDS, as well as the consequences of not sustaining it. Talking points might include the following:

- "The SLDS is part of the state's essential infrastructure—just like its roads or bridges. It helps people in the state work more effectively. If we do not maintain that infrastructure, we cannot do our work—and students, schools, families, and communities will suffer."
- "The SLDS is the largest collection of cross-sector data in the state. It informs state priorities, such as increasing our graduation rates and encouraging STEM (science, technology, engineering, and math) education. The SLDS program is the state's best resource for managing and using these data."
- "If SLDS work stops, we will lose the ability to support high-visibility initiatives and work aligned with stakeholder priorities." Include state-specific examples.

In addition to reaching out to state leaders, market the SLDS to other stakeholders to ensure that they understand its value and how they can access and use its data. Describe the

State Example: Utah

With its federal grant funds about to expire, Utah's SLDS team approached the state legislature in 2013 to request state support to continue its data system work. The team's outreach was designed to counter the perception of the SLDS as, in the words of one state senator, "the best-kept secret in Utah" by demonstrating the system's benefits. Team members shared reports generated with SLDS data that showcased positive outcomes from a program focused on intergenerational poverty, which received a relatively low amount of state funding. The reports helped illustrate the SLDS's role as an information source for evaluating the state's investments in education programs. benefits of the SLDS that are relevant to each stakeholder's needs. With a strong understanding of the SLDS and talking points like the ones above, these stakeholders can become powerful advocates for the SLDS among their organizations and state leaders. Cross-agency data governance groups and processes are also essential channels for communicating with all partners about the systems and procedures in place.

Strengthen support for the SLDS

Take steps to bolster the legal, financial, and collaborative frameworks surrounding the SLDS to solidify its role in the state. Work with partner agencies and lawmakers to push for state law authorizing the development, use, and—if possible—continued funding of the data system. Share testimonials from SLDS users and partners, and encourage stakeholders to advocate for the SLDS with their agency leaders and legislators. Focus on continually engaging the SLDS steering committee or other primary governance groups to sustain members' confidence in the system.

Demonstrating return on investment is a powerful way to communicate the importance of the data system. The value of the SLDS and its products can be presented in both quantitative and qualitative terms. Quantitative calculations can include cost savings such as decreased staff time spent fulfilling reporting requirements and more efficient dashboard development compared with each school district creating its own tools. Qualitative returns on investment can include the quality information provided by the SLDS for instructional or policy decisions, such as high school feedback reports and program evaluations. Measuring and reporting the level of user interactions with SLDS tools through usage metrics and requests for data also help demonstrate widespread use and dependency on the system.

Presenting a clear and thoughtful plan for the future will build confidence and support for continuing SLDS work. Explore strategies used by other states that have received state funding for their SLDSs, and share relevant strategies with legislators. Always approach prospective funders with examples of resources that are relevant to their interests. Identify stakeholder and funder needs that can be met in the future with their involvement.

Recommendations Going Forward

Take all possible steps to avoid scrambling for funding at the last minute when present resources are about to run out. When projects are funded by grants, future financial and sustainability planning need to begin almost as soon grant funds are received. Maintain current sustainability and communications plans so that they reflect changing needs and priorities, and so that stakeholders at all levels are aware of SLDS work and what is needed to sustain it. Begin outreach for funding needs early. For example, if the SLDS team is pursuing state funding, begin work prior to or at the start of the legislative session. Do not wait until the session is underway or until it is too late to allocate funds from partner agency budgets to support the data system.

Additionally, look for ways to make long-term costs more affordable by taking advantage of state product licenses and enterprise-level technical solutions that serve multiple programs. Take every opportunity to demonstrate how the data system helps the state avoid costs, such as by consolidating redundant systems or eliminating lengthy manual processes.

General Best Practices for Sustainability

Scenarios such as the ones outlined in this brief do not occur in isolation; most are the result of larger challenges that face SLDS teams on an ongoing basis. By anticipating and planning for these and similar situations, teams can address issues before they become serious threats to SLDS sustainability. The following strategies can mitigate risks to the SLDS in all three of the scenarios above as well as others.

- Develop a long-term plan for the SLDS, and share it with stakeholders. Knowing about upcoming priorities and products helps partners anticipate resource needs and understand the long-range goals for SLDS work.
- Implement strong outreach and communications efforts. Target outreach efforts to the needs and concerns of specific stakeholder audiences. To save on costs and time, consider how to use existing meetings, products, and communications channels more strategically.

Identify and document testimonials from SLDS users to demonstrate the system's benefits.

- *Maintain stakeholder engagement over time*. Without intentional efforts, the involvement of some partners might fall away over time. Make sure everyone feels that they are part of the SLDS work.
- *Establish strong data governance.* Ensure that processes are designed to meet all partners' needs and that meetings are productive and valuable to everyone involved.
- Determine how the SLDS can support leadership and stakeholder priorities to stay viable. Be prepared to explain the SLDS's value in terms that are relevant to that particular stakeholder.
- *Think outside the bax.* Explore how other sectors—such as healthcare or business—approach similar problems, and identify methods that might apply to SLDS work.

Just as sustaining SLDS work requires support from a broad range of SLDS partners, planning for sustainability should involve representatives of a variety of SLDS agencies and roles. Plans will benefit from input and buy-in from finance, budget, technology, and government affairs personnel at partner agencies, local education agency advocates, and stakeholder representatives—especially those contributing money or staff members to SLDS work now or in the future. In addition to involving people with the appropriate authority and expertise, successful sustainability planning depends on strong, collaborative, and trusting relationships among these individuals.

Additional Resources

Integrating SLDS Grants with Other Data System Grant Work: SLDS Webinar https://slds.grads360.org/#communities/pdc/documents/6447

Measuring and Documenting Return on Investment: SLDS Webinar https://slds.grads360.org/#communities/pdc/documents/6358

Privacy Technical Assistance Center (PTAC) Transparency Guidelines http://ptac.ed.gov/document/Transparency-Guidance

Privacy Technical Assistance Center (PTAC) Written Agreement Checklist http://ptac.ed.gov/sites/default/files/Written_Agreement_Checklist_0.pdf

SLDS Sustainability Planning Guide https://slds.grads360.org/#communities/pdc/documents/2640

Stakeholder Engagement & Sustainability: Helping Stakeholders Get the Most from an SLDS: SLDS Target Team https://slds.grads360.org/#communities/pdc/documents/5903

So Your Grant Is Wrapping Up ... Now What? SLDS Issue Brief https://slds.grads360.org/#communities/pdc/documents/8027

Sustainability Plan Guide & Template https://slds.grads360.org/#communities/pdc/documents/10501

Sustaining the Ongoing Work of the Data System: SLDS Issue Brief https://slds.grads360.org/#communities/pdc/documents/8124